Annotated Bibliographical list of e-learning Resources

(Please note that this list is regularly updated. Last updated – 12 July 2000)

Reports/Studies

2000

Ontario Ministry of Training, Colleges and Universities. "Increasing Degree Opportunities for Ontarians: A Consultation Paper. April 2000.

This paper outlines decisions about how to increase and a number of areas where they are seeking advice on access to a broader range of degree opportunities that will provide greater educational choices for Ontario students and promote excellence in our postsecondary institutions.

Cuneo, Dr. Carl. "The Underbelly of Online Learning in Canadian Post-Secondary Education." McMaster University: March 31, 2000.

This report describes the methods of delivery, software availability and basically where each piece of software/courseware is used and offered. The report provides a very comprehensive list of the key players in on-line learning. This valuable document outlines the necessity to try to span the "digital divide" as it continues to grow between online and offline educational institutions. As the conclusion so aptly states: "Institutions must be mindful that they reap not only what they sow, but that the harvest does not occur in the year of the sowing. It takes several years of laying down the technical infrastructural underbelly before we (educators) see the results in enhanced menus and suites of online courses. An institution cannot decide one year to start putting in place such infrastructure, and then expect to see the results the following year in a dramatically increased activity in remote online learning" (54).

Boak, Cathy. "Distance Education in Canadian Postsecondary Institutions: 1999-2000." The Node Learning Technologies Network: March 31, 2000.

This document is a draft of a report plan that will be completed by the NODE Learning Technology Network by the end of year 2000. The draft outlines research objectives and suggests how the project will be organized. Once completed, this report will be a valuable tool in the Canadian online technology's growing cannon of studies and reports.

Lowes, Dr. Mark. "Implications and Responses of Online Learning for Post-secondary Educational Institutions." Alermax Professional Services Inc. Stittsville: March 31, 2000.

This report concentrates on the implications of TML (Technology mediated learning) in post secondary institutions. In particular, the report discusses case studies of several global on-line institutions. The report discusses for-profit universities and predicts that many universities will disappear or will join consortia such as "Contact South." The report also identified areas of difficulty with on-line learning, such as the problems with accreditation (when a student registers at more than one institution). Lowes brings up the point that the internet is designed for "keyword searching" and often times cannot compete against traditional research methods yields in terms of volume and depth.

TeleLearning Network Centres of Excellence and Office of Learning Technologies with HRDC. "New Learning Technologies: Applications, Challenges, and Success Stories from the Front Lines." (Publishing Date should be: March 30, 2000).

The topics featured in this compilation are "New approaches for Preparing Teachers, New strategies for Workplace Learning, New Learning Technologies and Professional Development (in Nursing, Publication and Education), Pathways to New Learning Possibilities: Evidence from Four Projects Involving Partners with Disabilities, Online Education and Training-Leading Models and Approaches."

McGreal, Rory. "The Design, Development and Delivery of Internet Based Training and Education Report." New Brunswick Distance Education Network Inc.: March 28, 2000.

As stated in the report's objective: "The purpose of this report is to assist in narrowing the selection choices for a web-based learning environment" (3). This report studies various web-based learning environments from one key standpoint: functionality. Since the report focuses on both self-paced and group learning, this report is an excellent resource for institutions wishing to invest in e-learning technologies. Featured are some bigger name software products such as "Web CT" and some lessor known varieties like Vcampus.

Lowes, Dr. Mark. "The Online Learning Experience at the Post-secondary Level, the Potential for Learners and Future Direction." Alermax Professional Services Inc., Stittsville: March 17, 2000.

This report traces the history of distance education and discusses the merits of Technology Mediated Learning (TML). In the report, a valid question is raised; "How can universities integrate the best features of online learning with the best of traditional learning to create a more effective learning environment?" The report goes on to describe the "potential benefits for learners" such as 1) asynchronicity 2) interaction 3) collaborative learning 4) flexible just-in-time delivery. These four addressed areas usher in unprecedented levels of interest from a new-previously underrepresented demographic in the education system: working adults.

Council of Ontario Universities. "A Time to Sow - Report from the Task Force on Learning Technologies." Toronto: March 2000.

This report makes three key recommendations which are: the need for strategic planning specific to learning technologies at both the institutional and system levels, the need for a more supportive environment for faculty and students who use learning technologies, and the need for significant investment in learning technologies by the private sector and by the institutions themselves, facilitated wherever possible by strategic partnerships and collaborations. As a result, this report urges Ontario colleges and universities to "make the right decisions about the allocation of resources and bear in mind that the decisions that they make in the next 2-3 years will impact on their successes within the next two decades. (P2).

"Strategies for the Future." http://bates.cstudies.ubc.ca/paper2.html February, 2000.

"This paper suggests some key target groups for education and training via information highways. It stresses the need to develop a clear vision of what those services may look like, and suggests five key strategies for the future in developing such services: development of high quality multimedia resource materials, multimedia interpersonal communications, development of new instructional or curricular models, development of new technology infrastructures within education and training organizations, and the need for re-organization and re-engineering of education and training organizations."

The TLT Group. "Flashlight Program." Washington: February, 2000.

"The Flashlight Program helps institutions study and improve educational uses of technology while gaining control over the time, effort and money these applications require. Findings can be used to validate good practice, spot problems, and improve teaching and learning with technology" (1).

The Boston Consulting Group (Canada). "Fast Forward: Accelerating Canada's Leadership in the Internet Economy." Report of the Canadian E-Business Opportunities Roundtable. January 2000.

This is the report of the Roundtable formed in mid-1999 to develop a strategy got accelerating Canada's participation in the Internet economy. It's goal was to establish Canada as a globally recognized e-business leader to promote a higher quality of life for our citizens through economic growth, job creation and more convenient access to information.

This report is intended to stimulate discussion and action in all communities that have the power to drive the development of the Internet economy in Canada.

1999

Massey, William F. "Virtual U: The University Simulation Game." Paper presented at EDUCAUSE'99. See http://www.educause.edu/copyright.html for more details.

This paper describes "Virtual U, which provides a powerful, convenient and user-friendly tool by which institutional, professional and interested laypersons can participate in leadership challenges in a college or university setting. Users set, monitor and modify a variety of institutional parameters and policies, allocate resources as they see fit, and watch as results continually unfold" (1).

Teaching at an Internet Distance: The Pedagogy of Teaching and Learning." Report on seminar by The University of Illinois: December 7, 1999.

The report begins by listing key players in the online education/distance education field. Some Canadian examples include NODE and CADE. The report addresses key concerns within the higher education database. Namely those of "What constitutes good teaching and how can that be delivered via the technology?" as well as " how well do students learn via technology?" The report repeatedly raises the point that online learning must reinvent itself such that it is not merely a translation of "brick and mortar" style traditional learning and instead sets about to establish "pathways for change."

National Center for Educational Statistics/U.S. Department of Education. " Distance Education at Postsecondary Education Institutes 1997-1998." Washington DC: December 1999.

This PEQIS report presents findings for the 12 month (1997-98) academic year about the status of distance education in all post-secondary education institutions. It also includes an analysis of trends in distance education since 1994-95 for the subset of higher education institutions. In the most general terms, it finds that distance education appears to have become a common feature of many post-secondary education institutions and that, by their own accounts, it will become only more common in the future. While findings from this report will help to inform stakeholders-including individuals considering a post-secondary education, these issues raised questions: equity of access to post-secondary education, the costs of developing and implementing distance education programs, accreditation of and quality assurance in distance education programs, copyright and intellectual property rights, changes and challenges facing the role of post-secondary faculty and pressures on existing organizational structures and arrangements" (vi-vii).

Green, Kenneth C. Campus Computing 1999. Encino, CA: December 1999.

This study, produced annually, measures the use of information technology in American Higher Education. The study reports that in terms of the "rising use of technology in instruction," the percentage of classes using email rose to 53.4% compared to 44% in 1998. The 1999 survey data also reports that 45.5% of public research universities employ some type of policy concerning intellectual property on the web. The survey reports that 2/3 (70.0%) of institutions provide web site service/support and 27.8% of college courses have their own web page. The report also includes the results of a very exhaustive list of questions that are an invaluable resource for anyone interested in the details involved in e-learning.

Lowes, Dr. Mark. "On-Going Environmental Scan and Analysis of the Online Technology Mediated Learning Industry." Alermax Professional Services Inc. Stittsville: December 22, 1999.

This report delivers three key pieces of information. Firstly, it describes the current situation in North American universities both through new institutions such as Kanata's Unexus University or even the new consortia of countries: The University of the Arctic. Secondly, the report tackles the issues surrounding accreditation and the validity of an on-line degree/diploma. Thirdly, the paper compares initiatives surrounding Industry Canada's SchoolNet Multimedia Learnware with the American Counterpart Advanced Technology Program. Differences are highlighted on a table found on page 22.

Kidwell, Jill. "Go Boldly where no University has Gone Before: The Unintended Impact of Technology." Educause. PriceWaterhouse Coopers, October, 28, 1999.

This slide presentation contains a "Synopsis of the drivers creating market uncertainty, a review of the e-business framework to provide a structured way to think about the market and a deriving of lessons learned from examples of disruptive technologies and other institutions.

Punnett, Sam. "The Canadian New Media Producers' Survey 1999". Multimediator Strategy Group Inc. October 1999.

This report on the new media industry was conducted as follow-on research to the 1998 Wall Report and 1995 IMAT Report. It gives a perspective on this industry from a producers' point of view.

Author unknown. "The Costs of Networked Learning Project." Sheffield Hallam University, 1999.

"The main aim of this Joint Information Systems Committee (JISC) funded project was to identify the unrecorded or hidden costs involved with Networked Learning and produce a Planning Document and Financial Schema, using which, a complete picture of the actual costs of Networked Learning can be reached.

Lowes, Dr. Mark. "On-Going Environmental Scan and Analysis of the Online Technology Mediated Learning Industry." Alermax Professional Services Inc. Stittsville: September 30, 1999.

This report discusses questions of quality in on-line institutions and raises the issue of the "Digital Diploma Mill." For this nomer to be correct, certain factors must be present. They are: "no classrooms, untrained or non-existent faculties and/or officers being unethical self-seekers whose qualifications are no better than their offerings" (31). As a result, the Global Alliance for Transnational Education (GATE) has been established which sets about ensuring that quality standards are met. The idea of "Digital Diploma Mills" is a lovely parallel with the industrial revolutions' famous "Black Satanic Mills" that captured so many Victorian attentions.

Harasim, Linda, Ph.D. "A Canadian Virtual University: Models for an Online National Learning Network." Simon Fraser University: September 20, 1999.

This report describes the methodology behind creating a Canadian Virtual University. A key component to the report centres around the "Definition of a virtual university--what it is and what it should be." This section tracks how best to create a successful virtual university bearing in mind the factors that draw students to traditional universities in the first place - namely, a quality education by professors kept regularly engaged by frequent publishing, research and title. The degree or diploma granted from such an institution must "mean something." Therefore, a virtual university must satisfy these same requirements and the education gained there must "mean just as much."

Angus Reid Group. "Canadians' Assessment and Views of the Education System" Public Posting: June 22, 1999.

The survey results presented here stem from a National Angus Reid Poll of 1,515 Canadian adults conducted between May 11th and 16th, 1999. The results reveal Canadians' current perspectives on the education system in this country – both at the public and post-secondary levels and compares them to findings from an Angus Reid Poll taken earlier this decade.

Training and Development Associates with John Samuel and Associates Inc., Le Groupe Stanford Inc., "Reaching our Full Potential: Prior Learning assessment and Recognition for Foreign-Trained Canadians." Canadian Labour Force Development Board. Ottawa: June 1999.

This report discusses the necessity for immigrants or Canadians with foreign qualifications to be readily streamed into the Canadian Labour Market. The report also describes PLAR or "Prior Learning Assessment and Recognition" which is "a process identifying, assessing and recognizing what a person knows and can do"(i). This report strives to "urge the federal government to develop and adapt a national PLAR policy to demonstrate Canada's commitment to life-long learning" (iv).

"Distance Learning in Higher Education." CHEA update number two. June 1999.

This report summarizes some trends occurring throughout the U.S. such as "2.2 million college students will be enrolled in Distance Ed by 2002 - up from 710,000 in 1998." and that 33 states have created "State-wide virtual universities or have elected to participate in a regional or national virtual university." Also many states offering statewide distance education also offer a statewide library card. The rest of the report updates readers on the initiative by the University of Nebraska that is now offering on-line High School courses. Also, the slow growth of Western Governors University is picking up speed and boasts student enrollment from 26 states and 7 foreign countries.

Curry Joanne and Christine Massey. "Online Post-secondary Education: A Competitive Analysis." TeleLearning Network Inc., Burnaby: March 31, 1999.

This report profiles key participants in organized on-line learning in North America. Institutions are as follows: University of Phoenix, Western Governors, California Virtual University, the Open University of the UK, Nova Southeastern University, Stanford University, Indiana University, University of Illinois, Southern Alberta Institute of Technology, Athabasca University and the Technical University of B.C. The report provides a detailed description of each institution in terms of its accreditation, courses/programs offered, learners, pedagogical model, course production, course delivery, faculty, learner support, marketing and expansion strategy. This report is a very succinct overview and valuable resource.

"Today's Teaching and Learning: Leveraging Technology." American Productivity and Quality Center, 1999.

This study describes the successes of technology infrastructures in post-secondary institutions. Almost unanimously, institutions report an overwhelming level of success in terms of on-line administrative options-like being able to register, order books and receive grades. This study strives to "identify and examine innovations, best practices and key trends in the area of supporting the use of technology in teaching, as well as gain insights and learning about the processes involved"(7).

Farrell, Dr. Glen M. "The Development of Virtual Education - A Global Perspective." Chapter Two, pages 13-22. The Commonwealth of Learning. Vancouver: 1999.

The report states its mandate as obtaining a "snapshot of what is being done by whom and where to study the potential impact of such initiatives on a range of current practices." Chapter Two handled the issue of the Canadian on-line education market and would be most useful for those considering studying this further. By explaining what different Canadian institutions are doing and how successful they are at doing it, this chapter provides a concise and academic description of the on-line industry. The list of ICT (Interactive Computer Technology) is especially helpful on page 20.

Harasim, Linda. "A Framework for Online Learning: The Virtual-U." TeleLearning Network of Centres of Excellence, September 1999.

This article describes and discusses the V-U a Web based networked learning environment customized for post-secondary and/or workplace education. An important progression in VU is how instructors have to learn to "Facilitate" a course rather than "lecture."

SHEEO Survey of State Policies Related to Distance Education Technology. "Tearing Down Fences: The Open Range of Cyberspace." Portland Oregon: November 5, 1999.

This slide presentation outlines the results of participating states in a quest for statistical research concerning the availability/implementation of e-learning. Then, the report raises an interesting point about intellectual property and the issue of financial aid. If a student was taking a correspondence course, he/she would not be qualified to receive financial aid.

National Academy of Sciences. "Workforce Needs in Information Technology." Proposal for project/study: 1999.

This report (when finished after ten years of research) will "provide a framework for considering workforce needs in information technology and in similar sectors undergoing rapid technical change, examining trends in biotechnology for contrast, and including industrial, governmental, educational, and individual strategies for achieving and maintaining an adequate supply of skilled workers."

Kellogg Commission. "Returning to Our Roots - A Learning Society. National Association of State Universities and Land-Grant Colleges." Fourth Report: September, 1999.

This paper, as outlined in the executive summary, sets about to cement the notion of lifelong learning as a valid national goal for America. The creation of such as society must bear in mind three tenants. 1) "to respond to the ideals of access, and equality, pervasive rapid change and internationalization." 2) To tackle learning problems that have not been resolved by policymakers or education and to create new kinds of learning environments." and 3) to make changes so public research universities can meet new environmental demands." These points all fall under the larger rubric of the educational utopian ideal of "providing public support for lifelong learning."

Estabrooks, Maurice. "Development and Access to Multimedia Content: An International Comparison of Policies, Program and Practices." CICITT Inc.: August 1999.

"This report provides an overview and comparative analysis of the policies and programs of ten governments and three intergovernmental organizations relating to the production of, and access to, multimedia content in the arts, culture and heritage, and education and training sectors. The countries examined are France, Germany, The UK, Italy, Spain, Ireland, the U.S., Japan, Australia and New Zealand. The intergovernmental organizations are the European Union, the Council of Europe and UNESCO" (i).

Selwyn, Neil. "Educational Superhighways- in the public or private interest?" MCB University Press, Volume 9, Number 3, pages 225-231. July 22, 1999.

"By examining the key actors and motives behind educational Internet initiatives the paper argues that such policies are primarily economically not educationally driven. The implications of this are then considered in the light of increasing global information priorities" (225).

Massey, Christine. "Professional Development Markets for online Learning." TeleLearning Network Centres of Excellence, June 25, 1999.

This market research report asses the conditions for online "training the trainer" products. The report acknowledges the difficulty in tracking the results of the education and training services industry. Also the report values the total American education market at $670 Billion U.S.

Barolic-Zlomislic, Silvia and A.W. (Tony) Bates. "Investing in Online Learning: Potential Benefits and Limitations." Canadian Journal of Communication: June, 1999.

"In this paper, three Canadian cases are observed-two in British Columbia and one in Ontario. Two of the institutions are universities (UBC and the Ontario Institute for Studies in Education at U of T - OISE/UT), and one is a two-year university college (Kwantlen College in British Columbia). All three institutions are conventional campus-based institutions. However, both UBC and OISE/UT also have a long history of offering distance education programs, primarily in print format. Kwantlen on the other hand, prior to this case, had no previous experience in distance education. In all three cases, the distance learners were the primary target group"(1).

National Association of State Universities and Land-Grand Colleges. "How do they do IT? How do they pay for IT?" Office of Public Affairs and Commission on Information Technologies, May 1999.

This report discusses American higher institutions in terms of how they allocate spending on IT projects. The second part of the report profiles different universities across America and how each institution has responded to the IT learning environment including if they are a member of a Virtual university consortium.

The Institute for Higher Education Policy. "What's the Difference? A Review of Contemporary Research on the Effectiveness of Distance Learning in Higher Education." Washington: April 1999.

This report states in the executive summary that "Research on distance learning has been driven by what many are calling the "Information Revolution." Advances in technology offer both the general public and faculty a dizzying array of challenges that are unprecedented. Technology is having, and will continue to have, a profound impact on colleges and universities in America and around the globe. Distance learning, which was once the poor and often unwelcome stepchild within the academic community, is becoming increasingly more visible as a part of the higher education family. But the research and literature reviewed for this paper indicate that the higher education community has a lot to learn regarding how, and in what ways, technology can enhance the teaching/learning process, particularly at a distance."

"Will New Teachers be Prepared to Teach in a Digital Age? - A National Survey on Information Technology in Teacher Education." Milken Exchange on Education Technology: 1999.

"This survey commissioned by the Milken Exchange was intended to gather baseline information about the IT preparation that preservice teachers receive, and to develop a means of rating programs and program components as to their IT capacity.

Canadian Alliance of Education and Training Organizations, Office of Learning Technologies and HRDC. "Professional Development and Learning Technologies." Minister of Public Works and Government Services Canada: 1999.

This report determines " the professional development needs of planners and practitioners in the area of information technologies through a secondary analysis of the literature, analyzes key trends and issues in current professional development practices and conducts a national survey to identify professional development activities available to planners, practitioners and policy-makers for input into a database."

1998

Curry, Joanne, William R. Neill, Nicholas Galan, Linda Harasim. "The TeleLearning Industry - An Overview of Activities and Opportunities in North America." TeleLearning Network of Centres of Excellence, November 1998.

This report (although now somewhat outdated) describes the lag in Canada's participation in e-learning. Reasons can be documented to the adherence of Canadian course developers to quality standards; ensuring high quality is time consuming, labour/resource intensive work. The report suggests that Canadian businesses were also lagging in their support of e-learning. Credit was paid, however, to the Department of Foreign Affairs and Industry Canada as being obvious government leaders.

"Help Wanted: A Call for Collaborative Action for the New Millennium." Executive Briefing of a Study of IT Workforce Shortages. Virginia Tech, 1998.

This short report details the shortage in the IT workforce. Apparently 346,000 IT vacancies exist in U.S. IT firms. Also, companies are experiencing difficulties in retaining their employees.

Whalen, Tammy and David Wright. "Cost Benefit Analysis of Web-based Tele-Learning: Case Study of the Bell Online Institute Pilot Project." University of Ottawa: July 1998.

"The methodology used in this case study may, therefore, be used in future cost-benefit studies of Web-based training. All of the measures of financial performance indicated that the business case for Web-based training is strong. Based on the costing analysis of this study, Web-based courses are a cost-effective training solution for organizations with similar classroom-based training costs as those at Bell Canada" (4).

TeleLearning Network Centres of Excellence. "Virtual Campus Global Prototype." Prepared by Ileana de la Teja, Karin Lundgren-Cayrol and Chantal Paquin. Version 1, 1: 1998.

"This report covers the evaluation of the Virtual Campus Global Prototype (GP) developed at université's Centre de Recherche LICEF, in the context of the HyperGuides-Recto project subsidized by Fonds de l'Autoroute de l'information (FAI). The report aims to assess the experiments that took place from June 5-July 31st 1997, and to identify elements most likely to contribute to subsequent development of the Virtual Campus."

Twigg, Carol A. "Improving Learning and Reducing Costs: Redesigning Large-Enrollment Courses." Center for Academic Transformation, 1998.

This report focuses on debunking the myth that online courses are inherently more time consuming and expensive than their traditional in-class counterparts. Twigg's report focuses on a number of different issues surrounding the on-line learning debate such as course quality and cost effectiveness. Twigg ultimately argues that rather than colleges and universities focusing on more effective and efficient teaching, they should turn their attentions to more effective and efficient student leaning (4). Twigg also suggests that online courses (as long as they are redesigned to follow an on-line pedagogy rather than a traditional one) are in fact *cheaper* to produce than regular courses. Twigg does note however, that colleges and universities may not really care to offer more cost effective learning for students. "Since the participants become convinced that it is possible to enhance learning while reducing costs, at the end of the day, the discussion returned to one of our starting points: the different view of higher education's stakeholders as to who should harvest the savings" (26).

Lewis, Brian, Richard Smith, Christine Massey, Rory McGreal and Julia Innes. "Technology-Mediated Learning: Current Initiatives and Implications for Higher Education." Simon Fraser University and Tele Education New Brunswick: November 25, 1998.

This report serves as a useful resource for assessing the success of on-line courses throughout the world. The US still have a stranglehold on the on-line learnware market-however, in a recent (1998) table, the number of courses offered by Canadian institutions grew much more rapidly than the US. This proves that Canadian institutions are making great strides in on-line course offerings. The report describes the greatest numbers of course offerings being on-line undergraduate university courses. (by a landslide!)

"Virtually the Same? Universities and Colleges in the Age of New Media Learning: Opportunities and Issues." Knowledge@work: June10, 1998.

"There is reason to be optimistic in the role that Canada can play in the NMLM industry internationally. One of our strengths is a well established education system. We have long been know as a knowledge-based country, we have internationally recognized expertise in engineering and energy products. We are leaders in telecommunications. We have an extensive domestic market for our products. We have made substantial investments in projects such as CANARIE, giving us broadband capability, currently begging for content. It is logical for us to take up the challenge and become major players." This report has a fabulous works cited section and I recommend it as a "must read."

"Towards Virtual Learning Environments." World Education Report. Pages 83-90. Unesco Publishing, France: 1998.

This excerpt conservatively discusses the shift towards a virtual classroom in a regular school stream throughout the world. With technology's successes in higher education now openly accepted, the challenge exists to provide the same standard of multimedia computers in regular schools. Also, the excerpt discusses how the teacher will become a "learning coach." However, the closing letter by Albert Camus would perhaps contest that notion because he was writing about a teacher in the beginning of 20thC.

Ahola-Sidaway, Janice, Ph.D. and Margaret McKinnon, Ph.D. "Ten Principles that Foster Pedagogical Soundness of Multi-Media Learning Materials." Faculty of Education, University of Ottawa, April 1998.

This report examines ten pedagogical principles, namely, how effective learning materials should be to: 1) incorporate technological potential in pedagogically meaningful ways, 2) intrinsically motivate learners, 3) support links to prior knowledge, 4) support developmentally appropriate learning experiences, 5) support learner control and choice 6) support inter-dependent learning 7) promote critical literacy skills, 8) support equitable learning environments, 9) support formal schooling and 10) provide support to educators. The report concludes that the future for multimedia learning in light of these 10 principles is very bright.

Neff, Dr. Raymond K. "Breakfast on the Campus: What Technology Offers to Education - Some Evidence that Computers Do Improve Learning." Humanities and Social Services Federation of Canada. Ottawa: March 29, 1998.

This paper by Dr. Raymond K. Neff, is divided into two parts; Part One describes the success of the electronic learning environment (ELE) as a teaching tool compared to traditional means. With a sample of science, mathematics, humanities and psychology, Neff illustrates the effectiveness of ELE over the control group of "traditional post-secondary classroom driven learning." Part Two deals with Neff's view of ELE and how it shall succeed in the future. Neff argues that the Aristotelian view of a one-one ratio of teacher to student and libraries being a common ground for all are all equally and squarely met by ELE.

Bartolic-Zlomislic. The Costs and Benefits of TeleLearning: Two Case Studies." Distance Education and Technology, The University of British Columbia, 1998.

This report studies students, tutors and program directors and their critiques of various software involved in the business of higher education. The courses were evaluated on the basis of access, costs, teaching, interaction, organization, novelty and speed. This is an interesting report because the actual users were profiled rather than the administrators.

"Information Highway and the Canadian Communication Household." Draft Wave 1 Report. Ekos Research Associates Inc.. January 1998.

This study begins by assessing Canadians' attitude towards "the information Highway and have found that households earning over $60,000 a year, men, and younger people are most comfortable with the concept. "IT may be that the shifting locus of work from the traditional office setting to home is the most important/far reaching and liberating expression of the Information Highway Revolution. In that context, the issue may become more important for governments and businesses over the next few years." Although this report deals more with the internet as a business rather than learning tool, I believe there are some relevant statistics that can be easily transferred to the e-learning subject. The report states that " 41% of Canadians find the idea of working from home *extremely appealing*." If this is indeed the case and 41% of Canadians were permitted to work from home, the opportunities for home-based distance education would grow exponentially. By removing people's commute and constraints of "place," these employees, already comfortable using and working independently with technology, would readily embrace opportunities to follow post secondary education courses alongside their regular workloads.

1997

Kaplan, Karen, Marisa Martin, Rhonda Martin Epper and James Mingle. Best-Practice Report. APQC International Benchmarking Clearinghouse. "Creating Electronic Student and Customer Services: Learning from Higher Education and Business." *(Executive Summary)*. American Productivity and Quality Center. 1997.

The executive summary of this report presents the key findings discovered in the course of study. It is a brief overview.

Nordcity Group Ltd. "Internet Canada: International Preliminary Feasibility Assessment". Prepared as input to the Canadian International Information Strategy (CIIS) for Consulting and Auditing Canada. March 30, 1997.

This report assesses the feasibility of an international Canadian Internet channel to support Canadian policy and trade objectives abroad. It attempts to understand how to best use existing technologies tot he optimum way to integrate upcoming technologies such as the distribution of video programs over the World Wide Web.

Twigg, Carol A. "Notes for the June 4-5, 1997 NLII-ITP Symposium on Creating and Delivering Collegiate Learning Materials in a Distributed (Networked) Learning Environment: A Business Model for University-Corporate Collaboration." http://www.educause.edu/nlii/nliiitpnotes.html

This paper discusses a number of facts and assumptions about the four phases of the current process of creating of collegiate learning materials and using them in credit-bearing courses: 1) content assembly—the creation and maintenance of learning materials; 2) the marketing and distribution of those materials; 3) course delivery – the use of those materials in credit-bearing instruction; and 4) the certification of the learning that results."

O'Malley, Kady. "Brain Renovation." Canadian Business. Page 76-80. May 1997.

This article chronicles the history of ITI Education Corporation and how the private institute grew to meet the demand of Canadians with a university degree that required skills upgrading. The cost of the nine month course is $17,500 and the school trades on the Montreal stock exchange! The success for graduate placement is stupendous.

"The Multimedia Industry in Canada: An Analysis of Development Options." SECOR, 1997.

This report concludes that the multimedia industry in Canada is "very promising" for the Canadian economy because of the absence of geographical/economic barriers." However, the American market is such a huge competitor that government must intervene with funding for multimedia activities as not only an economic product but a cultural product- unique in that it effectively disseminates Canadian content on new platforms.

1996

Schmitt, Christopher H. and Larry Slonaker. "Computers in School : Do Students Improve?" Mercury Center. Part II. January 14, 1996.

Part One of this report points out some of Technology's shortfalls in the classroom through the Mercury Center's own research which seems to contradict National research. The Mercury Center found no correlation between improved test scores and technology. Part Two deals with the various arguments, (pros and cons) of technology in the classroom. A possible conclusion from the report could be that technology is existing "just for its own sake."

1995

Noam, Eli M. "Electronics and the Dim Future of the University." Science. October, 1995.

This paper discusses the demise of the traditional University structure as one based on the scholarly preservation of knowledge and suggests that this new information technology system will invariably be to the formers' detriment.

Books/Journals

2000

Preparing your Campus for a Networked Future. Mark A. Luker, editor. Volume 1, Educause Leadership Strategies, Jossey-Bass Publishers, San Francisco: 2000.

"This first volume in the EDUCAUSE Leadership Strategies series is designed to help university and college presidents and other top leaders in higher education understand and prepare for the impact of advanced networking on their institutions. It focuses on high-level issues, not technical details. It shares the visions and ideas of noted experts on the opportunities and challenges to come and seeks to place them within the context of finding a vision and strategic plan for an institution of higher education. Finally, it provides specific tips and recommendations on how individual leaders can work to prepare their institutions to be ready and waiting to take advantage of the new opportunities afforded by advanced networking."

Transition to the Knowledge Society:Policies and Strategies for Individual Participation and Learning. Kjell Rubenson and Hans G. Schuetze eds. UBC Institute for European Studies, Vancouver: 2000.

This book offers a selection of the papers presented at the international conference in Vancouver B.C. and has been thoroughly edited or rewritten by the authors. The keynote chapter is by Richard Lipsey and in this paper, establishes the theoretical foundation of a knowledge-based economics and links it to public policy.

1999

Best Practices in Higher Education Consortia: How Institutions Can Work Together. Lawrence G. Dotolo and Jean T. Strandness, eds. Number 106. Jossey-Bass Pubishers, San Francisco: 1999.

"The contributors to this volume are all accomplished executive officers of e-learning institution consortia. Drawing on their direct knowledge and in some instances providing case studies, they offer practical advice, distilled from years of experience, on a variety of matters" (1).

Information Technology in Higher Education: Assessing its Impact and Planning for the Future. Richard N. Katz and Julia A. Rudy, eds. Number 102. Jossey-Bass Publishers, San Francisco: 1999.

"The purpose of this volume is to provide guidance to campus leaders, information technologists, and institutional researchers as they carry on essential, collective discussions regarding the role of information systems, information services, and information itself. The authors provide us with a foundation for understanding how IT investments should be made, measured, and assessed, along with many practical suggestions and examples."

Renewing Administration: Preparing Colleges and Universities for the 21st Century. Diana G. Oblinger and Richard N. Katz, eds. Anker Publishing Company Inc., Bolton Massachusettes:1999.

This book, written by a variety of university personalities-notably professors and administrators, seeks to answer the following questions: "Can the desirable outcomes we (educators) are seeking be defined?" "Can we define processes that allow our institutions to more readily accept change?" "Can these efforts really contribute to transforming our campus infrastructures - not just enhance our current processes incrementally?" Finally, "can creative e-commerce solutions be designed that serve students as well as generate income?" The book is divided into three parts: administration, emerging administrative services and sustaining change.

Dancing with the Devil: Information Technology and the New Competition in Higher Education. Richard N. Katz ed. EDUCAUSE and Pricewaterhouse Coopers LLP. Jossey-Bass Publishers, San Francisco: 1999.

This book seeks to address "the first and dominant thread; change- change to higher education enabled by, or even driven by information technology" (xiv). Katz suggests in the preface that "digital media is now challenging those most venerable institutions- colleges and universities- to rethink the ways in which they serve society." Also Katz states that newly accredited providers of education who are "rich in cash and technology" will seek to "deliver those high-yield courses that currently subsidize much of today's educational enterprise." Finally Katz recognizes that universities and colleges must "renew themselves continually in the face of new opportunities and challenges." This book (from the preface) seems to delicately and fairly discuss the reality facing today's higher institutions.

Journal Of Distance Education. Margaret Haughey ed. CADE. Volume 14, No. 1, Spring: 1999.

This spring edition of the CADE journal contains three articles related to distance education for nurses. "The use of multimedia options for learners and learners' adaptation of these choices confirm the importance not only of learning style, but lifestyle as an aspect of distance education" (i). Other articles include topics as unusual as educating Australian children whose parents work for travelling carnivals and circuses.

1998

The Future Compatible Campus: Planning, Designing and Implementing Information Technology in the Academy. Diana G. Oblinger and Sean C. Rush, eds. Anker Publishing Company Inc., Bolton, Massachusetts: 1998.

This book, again featuring academics and key players in the development of e-learning, author chapters concerning the implementation of IT in the classroom. According to the back cover, the book will "assist in the development of a framework that focuses on IT planning on supporting an institution's vision and goals, as well as how to translate that plan into action."

The Impact of Technology on Faculty Development, Life, and Work. Kay Herr Gillespie editor. Number 76. Jossey-Bass Publishers, San Francisco: 1998.

"The foundational assumptions for this exploration of issues relating to the impact of technology are that (1) technology, faculty members' lives and work, and faculty development are inextricably bound together; (2) learning by doing is effective learning; (3) the rapidity of technological change and its importance for education will neither diminish nor disappear; and (4) it is imperative for us to reflect and then to act in increasingly vigorous ways on the possibilities and realities of technological change."

Meister, Jeanne C. Corporate Universities: Lessons in Building a World-Class Work Force. McGraw Hill Inc. Toronto: 1998.

The back cover of this book states, " human capital is replacing technology as the necessary foundation for improved productivity and competitiveness. Both a practical guidebook as well as a vision for the future of education, this book will open your eyes to new ways and methods of learning which go well beyond the classroom. With answers to frequently asked questions, extensive interviews with business leaders, concrete examples of how to use technological innovations to create a market-driven educational system and more."

1997

The Learning Revolution: The Challenge of Information Technology in the Academy. Diana G. Oblinger and Sean C. Rush, eds. Anker Publishing Company Inc., Bolton Massachusettes:1997.

"In this book, prominent (American) educational leaders offer accounts of current experiments and innovations using technology as well as predictions of how technology will profoundly shape the future of higher education. The fifteen essays in this book will provide the reader with a full spectrum of ideas about technology's role in higher education, both in and beyond the classroom."

Van Dusen, Gerald C. The Virtual Campus: Technology and Reform in Higher Education. Vol. 25 No. 5. The George Washington University, Washington: 1997.
"Higher education has always been seen as the curator, creator and critic of the basic knowledge of our world. This basic knowledge is being drastically affected by its rapid transfer through the new electronic channels. The traditional world of higher education must either embrace this new virtual world or become less relevant in the value it adds to society. How effectively institutions link the tools of technology with their educational vision and mission will determine their continued success in being a primary source of education and knowledge for our society. This report on the virtual campus will help institutions engage in conversation concerning their part in the virtual world expanding around us" (x).

1996

Daniel, John S. Mega-Universities and Knowledge Media: Technology Strategies for Higher Education. Korgan Page Ltd., London: 1996.

As stated in the front jacket of the book, "this insightful book dissects the global crisis in higher education, analyses issues facing campus universities and reviews the massive open universities (the mega-universities) that now enroll millions of students. The author explores the essentials of distance education and shows how universities can gain competitive advantage by developing this activity. Lessons from the hi-tech industry and current applications of the knowledge and media reveal much about how to make technology-based learning attractive to students and institutions. The final chapter offers a guide to the implementation of technology strategies within universities."

Krebs, Arlene. The Distance Learning Funding Sourcebook. 4th Edition. Kendall/Hunt Publishing Company, Iowa: 1996.

This book contains all references to key contributors in the field of distance learning. With chapters based on topics such as "foundations, Coporate Giving Programs, Regional, Local and Long Distance Telecommunications companies, the Cable Television Industry, Federal Government Agencies" etc., this book contains complete information about varies sources of Distance Learning Funding.

1995

Davis, Stan and Jim Bodtkin. The Monster Under the Bed. Simon and Schuster, Toronto: 1995.

This book begins by offering a description of how one particularly precocious child writes a story about a monster under her bed and turns it into a Web site. The illustration, prefaced and concluded with quotations chosen more for their author than their relevance, cushion the rest of this prophetic book. The book suggests that the traditional "3 r's" will be replaced with the "6 r's" which consist of: "risks, results, rewards, relationships, research and rivalry" (133). As the new "6 r's" suggest, this book repeatedly makes the point that the new driving force behind education will be almost solely economic.

Articles

2000

Carnevale, Dan. "Online University Teams Up with Hopkins Library to Offer Digital Resources." The Chronicle of Higher Education. April 21, 2000.

Regents College in the U.S. has found that "students need more than just courses that are accessible on the internet. To complete these courses, students need books and research material--and someone to explain where to find them." This article discusses initiatives taking place at Regents College.

Burbules, Nicholas C. and Thomas A. Callister. "Universities in Transition: The Promise and the Challer Technologies." TCRecord. April, 2000.

" In the future, many online courses will mix on-campus, off-campus, and international students. In their on-line interactions, location or distance will often not matter at all. Burbules and Callister write. Beyond matters of language, they criticize how the growth of on-line education and the addition of new providers of education means more "garbage" and more "empty trendiness."

Young, Jeffery R. "Web Site Provides Advice on Teaching with Technology." The Chronicle of Higher Education. April 5, 2000.

This article describes a new Web site entitled: "Virtual resource site for Teaching and Technology." The site, developed by the University of Maryland University College, gives 40 different resources. The University is planning a second side to the site to explore issues of on-line pedagogy.

Gillotte, Tony. "Distance Education gets Official O.K. in Thailand." The Chronicle of Higher Education. April 4, 2000.

The first Thai Masters student just received a telecommunications engineering degree from the national technological university in Colorado. Now Thailand's Chiang Mai University is interested in hiring the student as an engineering lecturer. The Thai Government has recognized his degree and is currently looking into incorporating this into their system.

Meister, Jeanne C. "Survey, Business Education: Savvy e-learners drive revolution." The Financial Times: April 3, 2000.

This article notes that in the past thirteen years, 100 four year colleges in the U.S. have closed and the number of corporate universities/colleges has risen from 400-1,600. Meister suggests that by 2003, 30% of all learning will be delivered over corporate intranets. Meister also gives an example of a corporate university-Hamburger University which has defined a real niche for itself.

Author Unknown. " G-8 Countries Agree to Promote Internet, Initial exchanges." News Edge: April 1, 2000.

G-8 ministers held a meeting in Japan and concurred on the subject that the "digital divide" must be reduced. They saw the need to establish "a body of experts to examine the implications of education without borders for the education system of each respective country."

Jung, Insung. "Korea: Can Edutopia Become a Reality?" Techknowlgia: March/April, 2000.

Korea has been re-assessing its education system to that of an "Edutopia" or "welfare education state." Korea has embraced the information age. The establishment of the Korean National Open University (KNOU) has proven itself by providing a high quality of education to students.

Author unknown. "E-teachers: Making the Transition to Online Instruction." Corporate Universities International. Volume 6, No. 2. March/April 2000.

This article describes how on-line teaching differs from traditional teaching in that on-line instructors must "master the technology, become comfortable with multitasking, become more of a facilitator than a presenter, learn to manage collaboration between students, encourage and practice interactivity and become accustomed to the dislocations of cyberspace." The article goes on to discuss how each of these steps are carried out.

Carr, Sarah. "After Half a Course, Professor Concedes Distance Education is not for him." The Chronicle of Higher Education. March 28, 2000.

This article concerns a professor who realized that his web-based teaching style did not work because he was not familiar enough with the technology. He stated that "for students who are highly focused and motivated, Distance Ed works wonders, but it is difficult for the average student to get much out of it at a conceptual level." This professor is not the norm however, only 10% of professors report dissatisfaction with online teaching.

Carr, Sarah. "As Distance Education Comes of Age the Challenge is Keeping the Students." The Chronicle of Higher Education. February 11, 2000.

This article discusses the issues surrounding why students drop on-line courses. Usually students experience difficulty with juggling family life, careers and their education. Also, some courses are not on-line friendly and are not flexible enough (in deadlines and such) for these learners.

Reevely, David. "Schools Unite to Offer High Speed Net Access." The Ottawa Citizen, Ottawa: January 31, 2000.

The University of Ottawa, Carleton University and La Cite Collegiate have banded together to offer their students faster and more efficient internet access than they could offer themselves. Students pay $110 for a year and get access to a pool of high speed modems provided by AT&T.

Carnevale, Dan. "Master Plan in Washington State Calls for More Online Instruction." The Chronicle of Higher Education: January, 21, 2000

This article discusses how American universities anticipate the interest in their offerings to grow by 70,000 additional students over the next ten years. Since these increases will take additional space, Universities are investigating offering distance education as a solution for students who do not wish to share cramped quarters.

Carr, Sarah." Enrollment Growth Remains Slow at Western Governor's University." The Chronicle of Higher Education: January 14, 2000.

This article describes the modest growth of Western Governor's University and attributes this to the time the University took in setting up and establishing itself.

Young, Jeffery."Faculty Report at University of Illinois Casts a Skeptical Eye on Distance Education." The Chronicle of Higher Education: January 14, 2000.

This article suggests that on-line learning may not be a gold mine simply because "providing high-quality instruction is more costly and Time consuming on the internet than in a traditional classroom." The article also suggests that "High quality teaching is not always assured through distance ed."

Carr, Sarah. "Indiana University's Virtual High School Criticized over Accreditation." The Chronicle of Higher Education: January 14, 2000.

Indiana University has connections with a virtual High School that has falsely advertised its accreditation. This article attempts to "set the record straight" by insisting that the virtual High School is no way competing with regular, traditional high schools.

Mendels, Pamela. "Government Study Shows a Boom in Distance Education." The New York Times on the Web: January 12, 2000.

This article discusses Pennsylvania State University's successful offering of 400 courses on the web. The school plans to add another 200 courses by 2004. A recent report discovered that 34% of U.S. institutions offered distance education courses and by 2001, more than half of U.S. institutions will be offering web-based courses.

Author Unknown. "Deans Take on Dot-Com Interests." Financial Times: January 10, 2000.

This article describes the consortia called UNext.com that includes business schools at Chicago, Columbia, Carnegie-Mellon, Stanford and the London School of Economics. Some schools are concerned that these inexpensive programs developed by top schools will damage less prestigious schools.

Mendels, Pamela, "Predictions for the Top Tech Issues in Schools." The New York Times on the Web, New York: January 5, 2000.

This article functions really more as a forum for different educators and administrators to air their predictions for technology in classrooms in the future. While not rigidly confined to post-secondary concerns, these comments are useful in predicting possible trends and identifying gaps in the present (American) system.

1999

Kiernan, Vincent. "Microsoft will give MIT $25 Million for Educational-Technology Research." The Chronicle of Higher Education: 1999.

This article praises Microsoft's role in helping develop educational materials. One catch however-since Microsoft is funding the research-the findings become Microsoft's property.

"Coalition of Businesses, Non profit Organizations and Government partner to reach underserved youth in Thousands of Communities and Schools." EDNet Feature Story, November, 1999.

This article discusses a new initiative called "Power UP" sponsored by American corporations government. the initiative seeks to close the digital divide-especially since it is yawning on the basis of racial, economic and geographical lines. Power UP on-line partners heavily with AOL. (Seems to be a similar idea to our own CAP and SchoolNet programs).

Perley, James and Denise Marie Tanguay. "Accrediting online Institutions Diminishes Higher Education." The Chronicle of Higher Education. Section II: October, 29, 1999.

This article expresses concerns that many members of academe share: fundamentally that "online learning is nothing more than a collection of marketable commodities"(B4). A very important point is raised however: "The goal of higher education is to produce a student who is capable of independent and creative thinking and decision making, not merely a receiver of knowledge that has already been recorded... in the name of efficiency, commercial interests are creating an increasing number of institutions without a research dimension"(B4-5). Also "many on-line colleges and universities already compete for students by advertising the easy A, the fast track to the degree, the quick fix for the résumé-without the effort that is required for true scholarship"(B5).

Magner, Denise K. "The Graying Professorate." The Chronicle of Higher Education, September 3, 1999.

This article displays a useful series of questions, charts and graphs that illustrate professors' attitude/use of technology and other factors affecting their job such as tenure, student concerns etc.

McCollum, Kelly. "Technology and Collaboration are Needed for Lifelong learning." The Chronicle Daily News. September, 1999.

"This article reaffirms the point that institutions need to reformulate how they teach, placing more emphasis on preparing students to continue learning throughout their lives."

Olsen, Florence. "State Universities Spend Millions to Add and upgrade Computers, Report says." The Chronicle of Information Technology. July, 1999.

This brief article discusses how state universities have poured millions of dollars into technology and among their top spending priorities were "upgrading computer equipment for schools." Also, many universities (2/3) had joined in forming technology partnerships or virtual universities. The largest of these being, of course, Western Governors University.

Author Unknown. "Divisions Over Internet Learning." The Associated Press. April 6, 1999.

The article questions whether the leap onto the e-learning bandwagon is necessarily a fair one. Many students lack the financial resources or computer background to succeed at such courses. Usually minorities fall into these categories.

Young, Jeffery R. " Are Wireless Networks the Wave of the Future?" The Chronicle of Higher Technology. February 5, 1999.
"At the University of Oklahoma, freshmen entering the engineering program must purchase laptops and lease $400 wireless-network adaptors. Also at the Johns Hopkins University's School of Public Health, officials put ups a wireless network because it was cheaper than adding data ports to their 800 year old buildings. Also, many institutions are experimenting with setting up wireless LANs and will probably feature both wireless and wired options."

Howard, Ross. "An Ivory Tower's Radical Blueprint - A University planned for a small B.C. town would cost the public very little. Tuition? That's another story." The Globe and Mail, Toronto: January 11, 1999.
A new private university is in the works for the small B.C. town of Squamish. For $25,000 per year in tuition, the university will gather most of its students from overseas. A new group of affluent Asian students are being seriously courted by all Canadian universities- this institution is no different.

1998

Cardenas, Karen. "Technology in Today's Classroom. It slices and it Dices, but does it Serve us Well." Academe: May/June 1998.

This article thoughtfully and critically examines the debate surrounding technology in the classroom. This author, a Spanish Professor in South Dakota, suggests that technology is not well suited to the delivery of advanced language courses. The author, although a strong believer and user of certain technologies such as email, power point slide presentations for lectures and a program called "Picture Tel," she affirms that although useful in her profession, they are certainly not "the answer." She compares rhetoric surrounding technology as similar to advertising campaigns for the food processing tool "Vegematic" which produces "mounds of curly french fries in minutes"(29).

McCollum, Kelly. "Distance Education Students Receive Degrees from Afar in Electronic Commencements." The Chronicle of Higher Education. May, 1998.

This short article describes the commencement activities for Old Dominion University in the US. Since 150 graduating students were distance education students, they gathered in classrooms to watch the commencement ceremony via satellite. These classrooms-now witness to graduation, were the location of the student's study as they learned in evenings watching satellite TV lectures.

Selingo, Jeffery. "Information Technology." The Chronicle of Higher Education. May 1, 1998.

This article describes the ways in which electronic course delivery will enhance learning. The article hopes to pacify small-private American (or Canadian) colleges that they will not "lose out" as a response to e-learning. On the contrary, Selingo suggests that many students will still enroll in small colleges because they prefer the one-on-one human contact between lecturer and student. The article describes the small colleges and massive e-learning conglomerates as the difference between specialty food stores and massive grocery stores. Therefore, would e-Learning be the "big box store" of education?

McGreal, Rory. "Information Technology and Telecommunications: A course on the World Wide Web." Journal of Distance Education. Volume XII No. 1/2, 1997. (67-85).

This article discusses how the author headed a group that developed an online course. McGreal argues that the world wide web is not robust enough to be considered an effective learning environment. He does however, assert the importance of the www as an educational *tool*. The pilot project featured a consortia including key resources from Alberta, BC, New Brunswick and Newfoundland.

Lewington, Jennifer. "The Learning Beat - Postsecondary Schools Seek New Links Abroad." The Globe and Mail. Toronto: January 5, 1998.

This article describes Prime Minister Chrétien's trade mission to Latin America to encourage foreign students to take Canadian post-secondary courses. In a recent study, results indicate that numbers of foreign students enrolled in community college courses has risen significantly whereas the numbers of foreign students enrolled in university courses has dropped. Perhaps the price of tuition is prohibitive?

1997

Poole, Gary. "Back to the Future: What can we Learn From Current Debates on Educational Technology?" Journal of Distance Education. Volume XII No 1/2: 1997.

The article abstract reads as follows: "This paper discusses two key issues: contact with students and sanctity of place which are two values that surfaced most vehemently. The paper argues that online course delivery will not undermine either the contact we value or the sanctity of place if we (institutions) use technology wisely."

Bates, A.W. (Tony) and José Gpe. "Crossing Boundaries: Making Global Distance Education a Reality." Journal of Distance Education. Volume XII No 1/2: 1997.

This article details the experimental partnership between UBC and ITESM in Mexico and how both institutions conspired in order to deliver five extremely successful online courses. Clearly, through this case study, international (boundary free) education fills a niche and resulted in a very positive experience for these Canadian and Mexican students.

Annand, David and Margaret Haughey. "Instructors' Orientations Towards Computer-mediated Learning Environments." Journal of Distance Education. Volume XII No 1/2: 1997.

This study examines six instructors' experiences with computer conferencing. The doctoral students conducted their research by interviewing six professors and found differences between each in terms of student/instructor interaction, marking and preparation time varied dramatically. The article concludes that the instructor's experiences usually co-related with that individual's view/philosophy of learning.

Copeland, Lynn, Elaine Fairey and Todd M. Mundle. "Libraries and Online Teaching and Learning." Journal of Distance Education. Volume XII No 1/2: 1997.

This short article announces that the Simon Fraser University Library has an online inter-library loan system which is linked throughout the entire world. Also, distance education students are encouraged to communicate directly with reference librarians who will in turn email or phone responses to student queries.

Buckston, Jeff. "New Learning Opportunities." University Manager. Pages 23-26: Fall, 1997.

This abbreviated article praises technology in universities because Music students can "analyze songs by how the notes look and a study in Art classics is enhanced through digitized slides." Links to the world wide web also enrich professor's research because they can converse globally with other experts more easily.

Trub, James. "The Next University - Drive-Thru U." The New Yorker. Pages 114-123. New York: October, 1997.

This clever and insightful article provides some humour into the whole e-learning debate. Focusing on the newly established case study of the American University of Phoenix, the university founder, John Sperling defends his institution. As a university focusing solely on "applying what you've learned the next day at work," and "assisting people in getting that piece of paper," the university has clearly carved itself a very lucrative niche.

Email/Articles/Clippings

2000

Young, Jeffery R. "Harvard Considers Limits on Teaching Online Courses for Other Institutions." Email received April 25, 2000.

"A Harvard University committee has proposed new guidelines that would forbid the university's professors to teach online courses for other institutions--unless they first obtained the permission from Harvard officials. The new rules would specifically apply year-round in the case of online courses, although in general they would permit faculty members to teach traditional summer-school courses without seeking permission first."

Young, Jeffery R. "The Lowly Telephone is Central to Some Distance-Education Courses." Email received April 25, 2000.

"When some colleges and universities put courses 'online,' they mean the telephone line-not the internet. Examples include holding review sessions through teleconferences and testing students' pronunciation using voice mail. Some instructors even deliver live one-on-one instruction using regular phone calls."

Author unknown. "E-Commerce May Help Colleges Cut Costs and Paperwork." The Chronicle of Higher Education.: April 21, 2000.

"The Fullerton campus estimates that the e-commerce systems will lower costs from about $150 per transaction to about $10 to $15 per transaction by eliminating the workers and paper required in the traditional method."

Carr, Sarah. "Challenging Commercial Vendors, George Washington U. Enters Coureware Market." The Chronicle of Higher Education: April 20, 2000.

"Technicians at George Washington University decided to create a courseware system called "Prometheus" which is putting the university in competition with private companies like Blackboard and Web CT. The professors at George Washington University use 'Prometheus' to let students in traditional courses have discussions, post lecture notes and make presentations online. The university also uses 'Prometheus' for its online distance-education courses."

Carr, Sarah. "With Dozens of sites marketing distance education courses, colleges seek to align with the survivors." The Chronicle of Higher Education. Received: April 10, 2000.

This article describes the company called "Hungry Minds" that has struck a multimillion dollar deal with Yahoo and has planned on making its Web site the "number one destination for students interested in any virtual-education opportunity."

Author unknown, "George Institutions Look at New Ways to Recruit and Retain IT Employees." The Chronicle of Higher Education Online. (Excerpt) : April 6, 2000.

The University system in the state of Georgia is "exploring more effective methods to attract and retain high-tech workers." One such method is to "create cooperative-education programs in which a student enrolled in an IT degree program could attend a university tuition free in exchange for agreeing to accept an internship at the university following graduation."

Young, Jeffery R. "Web site Provides Advice on Teaching with Technology." (source unknown) Received April 5, 2000.

"A new World Wide Web site offers a guided tour of virtual classrooms throughout cybersapce, highlighting a range of interactive components that professors can use in their own online courses. The goal of this site ... is to 'get ideas of how you can integrate multimedia effectively.'"

Author unknown, "Just-in-Time-Learning." Computerworld. April 3, 2000.

"The electronic just-in-time learning market is expected to reach $11.4 billion in 2003, up from over $1 Billion last year, according to international data (IDC)."

TIG Newsletter: E-Learning for Everyone, April 1, 2000.

This article provides background on E-learning. Suggests some pitfalls such as problems of slow internet connections, software problems, volume of email and mental and eye fatigue from reading on the screen. This article is an excellent overview of current e-learning trends.

"Universities Master Web-based Administration." March 30, 2000.

Penn Sate, Ohio University and Washington State University have all implemented Web-based document management and knowledge management systems. The conversations have been time/resource saving and successful.

Kelly, Jim. "National News: Universities Urged To Face Virtual Threat." March 28, 2000.

This article highlights key events in e-learning such as the development of a virtual university in Wales and the global competition for "foreign, mature and working student who can take distance courses more easily and at less cost will increase."

"IT and Educational Leaders Turn up for a New Initiative in the Quest for Life-long learning." Canada News Wire, Toronto, March 28, 2000.

This news piece describes the launch of a new Web site: www.tlilearn.org. It provides professors and corporate employees with one-step access to thousands of training options, as well as tracks and manages individual and corporate training activity. The article also discusses a new consortia between heavyweights such as Microsoft, Hewlett-Packard and Humber College.

"Project to Develop Virtual Distance Learning in Higher Education." February 17, 2000.

The HEFCE (I assume a) Web site's proposal of a project plan, identifies the UK's goal to attract 75,000 extra overseas students to the UK by 2005 and to increase the UK's share of the fee paying market from outside the EU, in relation to English speaking countries to 25% by 2005.

Tugend, Alina. "British Government Announces Plans for a Distance Education Venture." London: February 16, 2000.

"A new virtual university is being organized, owned and operated by a consortium of higher education institutions working with the private sector and overseas partners." Impetus: to expand "Britain's share of the overseas higher education market."

"Universities to Catch the E-wave." BBC News online. February 15, 2000.

The UK's higher education funding council wants to create an e-university for an entirely internet-based degree. Hoping to attract overseas students and working adults, the council will be asking the British Government for 50 Million pounds. This institution, once finished will be entirely funded by tuition.

Corporate Universities International Web-letter- Volume 4, February 15, 2000.

In this short excerpt, Jeanne Meister mentions that the US educational marketplace is worth $740 Billion US and growing. Also interesting is that the primary target group for higher education is no longer the 18-24 age group.

Duderstadt, James J. "A Choice of Transformations for the 21st Century University." Michigan University, February 3, 2000.

This article suggests that we can expect to see several world universities and would view their marketplace as that of a global one. The article discusses the efforts around the globe to build virtual universities and maintains an upbeat tone.

Young, Jeffery. "Scholar Concludes that Distance Education is as Effective as Traditional Instruction." Email received, February 10, 2000.

This email states (as the title might suggest) that there is "no difference between traditional classroom instruction vs. distance education in terms of effective education."

Carr, Sarah. "Chapman University Administration Studies Distance Learning's Effect on Faculty Pay." Email received on February 11, 2000.

This email discusses the problems of financial compensation for professors throughout academe. As the numbers of online course rise, a new system must be developed to compensate professors.

Carnvale, Dan. "Commission's chairman says Congress Need not Regulate Distance Learning." Email from February 4, 2000.

This news release details the difficulty in attaining a balance between "the entrepreneurial spirit and high quality education."

1999

Brahler, Jayne C., Nilss Peterson, Emily C. Johnson. "Developing on-line Learning Materials for Higher Education: An overview of Current Issues." Educational Technology and Society: March 1999.

This overview of recent trends draws attention to the phenomenon of computer-assisted instructional materials (CAI). Distributing CAI over the Web has become an almost "required course of action." The overview also denotes how much time is required to produce one hour of electronic instructional material. and the table suggests for a basic system with text and hyperlinks being 30-200 hours (4). The overview concludes with the suggestion that since developing on-line courseware is such a labour-intensive and costly task, it should be taken up by students so that it will enhance their future employability.

Carnevale, Dan. "Online Courses of 1,000 students will become Common, Industry Says." Washington: December, 2, 1999.

This article suggest that in 20 years, on-line classes with as many as 1,000 students will become the norm. The article suggests slashing tuition fees to $100 USD for a single course.

Corporate Universities International Web Letter - Issue #21. November 17, 1999.

This overview of e-learning features an important segment by Jeanne Meister. A question was raised: "What was the single biggest challenge in regards to online learning?" The answers are as follows: "Measuring the benefits and effectiveness of online learning, developing high value memorable events, providing on-line coaching and support, investing in technology."

Chambers, Gail. S. "Toward Shared Control of Distance Education." Email received November 19, 1999.

This email asks the question of if universities should "own distance education courses." It suggests that what is at stake is the "system of education that has achieved excellent for the common good."

Liikanen, Erkki. "Europe, An Information Society for All." Facsimile from December, 1999.

This letter describes the eEurope initiative. The initiative can be viewed at the following URL: http://europa.eu.int/comm/dg13/index.htm

1997

Mason, Robin. "New Models for Delivering Lifelong Learning." Institute Of Educational Technology, The Open University: 1997.

This article discusses different consortia around the world and how they specialize in their respective fortés. This article provides a list of different types of distance learning institutions and assesses the merits and shortcomings of each.

1996

McCormack, Terrence. "Understanding the True Cost of Distance Learning." MC Journal: The Journal of Academic Media Librarianship. V4#1, Summer, 1996.

This article discusses an interesting point – that "the effort to stay on the edge of distance learning developments may be the biggest factor impeding the practical development of distance learning programs in academia today." However, the article concludes by saying: "only in this way (mix and matching of technology) will distance learning programs meet current needs, while building a competent knowledge base for the ultimate installation of newer technologies for our future users."

Carnvale, Dan. "Instructors Take a Turn as Students to Learn about Online Teaching." (date?)
This article discusses the practicality of teachers taking online courses so that educators could experience what it is like being a student. Trainers will do things such as not returning emails promptly and other annoyances that assist teachers in understanding how students feel.

Author/date unknown. "E-rate program is a Success Case Studies in Four Cities Suggest." The email describes findings that e-rate discounts have had a "profound effect" on the following American cities: Chicago, Cleveland, Detroit and Milwaukee. The email also concentrates on the continual debate surrounding quality in an online environment such that a study "quality on the line" was commissioned by Blackboard Inc. and has decided to measure quality be the results of the students. The study then established a series of benchmarks upon which quality could be measured.